

## ABSTRACT

The invention relates generally to a comprehensive, integrated computer-based system and method for undertaking an engineering design and development effort in a virtual collaborative environment, identifying qualified fabricators for manufacturing a part design based on fabricator capability information stored in a global registry database substantially maintained by the fabricators themselves, and conducting a virtual bidding process whereby electronic representations of three dimensional model and specification data are provided by a central server. The central server further supports the bidding process by providing quasi-real time audio, video and graphics, and the contracts negotiation and formalization steps.